

3. (Amended) A lithium intercalation compound containing lithium manganese oxide and having a spinel structure as claimed in claim 1, where the specific BET surface area is from 0.5 to 1.9 m²/g.

A 4. (Amended) A lithium intercalation compound containing lithium manganese oxide and having a spinel structure as claimed in claim 1, where the specific BET surface area is from 0.6 to 1.5 m²/g.

5. (Amended) A lithium intercalation compound containing lithium manganese oxide and having a spinel structure as claimed in claim 1, where the particle size, determined from the d₅₀ value, is greater than 1 μm.

6. (Amended) A lithium intercalation compound having a spinel structure and containing lithium manganese oxide as claimed in claim 1, where the diameter, determined from the d₉₀ value, is less than 25 μm.

7. (Amended) A lithium intercalation compound containing lithium manganese oxide and having a spinel structure as claimed in claim 1, where the diameter, determined from the d₉₀ value, is less than 20 μm.

2 A 11. (Amended) A process for the preparation of a lithium intercalation compound containing lithium manganese oxide and having a spinel structure as claimed in claim 8, where the particulate, crystalline spinel precursor compound consists of the three phases MnO, LiMnO₂ and Mn₃O₄.

A 3 sub B 8 14. (Amended) A process as claimed in claim 8, where, after the heating in an oxidizing atmosphere, the resultant solid is suspended in water with addition of one or more alkaline lithium compounds, and the suspension is spray-dried at a temperature of from 100°C to 400°C.